LAMBERT AND ANTHONY

MEDIUM WAVE TRANSMITTING ANTENNAS

2613 CRAIG AVENUE

CONCORD, NORTH CAROLINA 28027

ORIGINAL

TELEPHONE (704) 786-8874

JUSTINE HOPE LAMBERT YORK DAVID ANTHONY 1 15 / 15 mg

17 March 1992

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MAR 2 3 1992

Ms. Donna Searcy, Secretary Federal Communications Commission 1919 M Street, NW Washington, DC 20554

Federal Communications Commission Office of the Secretary

RE: RM-7907

MM Docket 92-32

Blacksburg and Roanoke, VA Lewisburg, West Virginia

Honourable Secretary:

Transmitted herewith on behalf of FERNBROOK BROADCASTING COMPANY, INCORPORATED is an original and four copies of INITIAL COMMENTS to be incorporated as pleadings in the above-captioned application. FERNBROOK BROADCASTING is licensee of WKDE(FM) Altavista, Virginia and has standing in the proceeding.

Should there be enquiry please direct it to the undersigned.

Very truly yours,

York David Anthony Consulting Engineer WKDE Altavista, Virginia

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FOOTEN SECTION

Before the FEDERAL COMMUNICATIONS COMMISSION Wshington, DC 20554

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In the matter of)	Federal Communications Commission Office of the Secretary
47CFR 73.202[b])	RM-7907
FM Table of Allotments)	221 / 50 /
Blacksburg and Roanoke, Virginia)	MM DOcket 92-32
Lewisburg, West Virginia)	

INITIAL COMMENTS

Now comes Fernbrook Broadcasting Company, Incorporated, licensee of WKDE (FM) Altavista, Virginia, who, pursuant to 1.415 of the Commission's Rules and Regulations seek to advance initial comments in the above-captioned proceeding. In support whereof, Fernbrook Broadcasting, Incorporated (WKDE) show the following:

- 1. WKDE operate in channel 288A at Altavista, Virginia. According to Exhibit 1 (an FCC 73.207 spacing study) WKDE is shortspaced approximately 3 km to the construction permit at Roanoke, Virginia on channel 287A (BPH-8806020J). This prohibited shortspacing is principally the cause of why WKDE cannot increase to the maximum for its Class (6 kw and 100 meters or the equivalent).
- 2. The proposed rulemaking would substitute channel 285C3 for channel 287A at Roanoke. The required C3 (Roanoke) to A (Altavista) separation would be 42 The present situation (287A at Roanoke and 288A at Altavista) is 69 km, which as mentioned before, would be a prohibited shortspacing.
- 3. The authorised site for the Roanoke station has a published standard 8-radial HAAT of 23 meters. However, in order to process a shortspacing application under the present rule 73.215, we must assume that Ms. Brown operate with 100 meters above the average terrain (see attachment). Under the assumption that Ms. Brown did operate with 100 meters above the average terrain, she would have an HAAT on the bearing towards WKDE of nearly 200 meters (see the attached). For example, at 100° (the direct line bearing from the Brown facility to WKDE) her 60 dBuV contour will go 38 km in lieu of the usual 28 km, and her 54 dBuV interference contour will go 57 km in lieu of the usual 43 km. Inasmuch as the stations are 69 km separated it is obvious that, due to quirks in the terrain, that the proposed channel 105.3 operation at Roanoke will cause intolerable interference to WKDE should it operate on that channel.

- 4. The proposed Blacksburg-Lewisburg-Roanoke exchange will have tremendous benefit to WKDE. Presently, Roanoke propose to change to 104.9 (285C3) which will be the third adjacent to WKDE. The Roanoke-Altavista shortspacing will be eliminated, as will the huge area of interference between Roanoke and Altavista if the status quo is maintained.
- 5. We believe that the public interest, convenience, and necessity will be served by the prompt and expiditious adoption of RM-7907 as it will permit WKDE to more readily increase to 6 kilowatts MERP, and it will eliminate a potential zone of interference due to terrain quirks between Altavista and Roanoke as well as a shortspacing between those two cities.
- 6. WHEREFORE, Fernbrook Broadcasting, Incorporated urges the Commission to adopt the rulemaking in MM 92-32 as expiditiously as possible, and WKDE fully supports the requested changes in that docket.

Respectfully submitted,

David Hoehne

Fernbrook Broadasting, Incorporated

WKDE Altavista, Virginia

This the 17th day March, 1992

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION 2 --- DO 20554

In the matter of)	
)	
47 CFR 73.202[b])	RM-7907
FM Table of Allotments)	MM DOcket 92-32
Blacksburg and Roanoke, Virginia)	FIT DOCKEL 32-32
Lewisburg, West Virginia)	

ENGINEERING PLEADING IN SUPPORT OF INITIAL COMMENTS

Comes now York David Anthony, of 2613 Craig Avenue, Concord, North Carolina 28027, who, pursuant to section 1.415 of the Commission's Rules, wishes to present engineering data in support of initial comments filed by Fernbrook Broadcasting, Incorporated, licensee of WKDE(FM) Altavista, Virginia. My qualifications as an electrical engineer are a matter of public record with the Commission. In support whereof I present the following:

I currently represent the lead petitioner in the above-captioned docket (Blacksburg-Christiansburg Broadcasting Company, Incoporated, licensee of WVVV Blacksburg, VA) and am intimately aware of the case.

In addition I represent WKDE, which is not directly a party to this case, but, if RM-7907 were to be adopted, would receive significant benefits to its operation.

The thrust of the engineering argument is that presently, one of the Joint Petitioners in the above-captioned application operates in channel 287A at Roanoke. WKDE operate in channel 288A at Altavista. These stations were fully spaced under the 'old' FM rules but are now 2.93 km short (see attached Exhibit 1). Originally I was asked by Fernbrook Broadcasting (WKDE) to prepare a contour protection 73.215 application that would permit WKDE 6 kw and fully protect the Brown station at Roanoke.

Exhibit 2 attached illustrates the rather inhospitable terrain 'boost' Ms. Brown currently enjoys on channel 287A at Roanoke. The direct bearing between the Brown 287A station and the Altavista 288A station is 100 degrees. On that bearing the HAAT of the Brown station (for 73.215 purposes, assuming a classical 8-radial HAAT of 100 meters and 7.77 dBkW (6 kw) output) is 185 km.

The normal 54 dBuV contour for a class 'A' station (F 50,10) is 43 km. In the Brown case (on the direct bearing between Brown and WKDE) the 54 dBuV contour at 3 kw is 48 km and at 6 kw is 56 km.

In order that WKDE were to actually have to protect the Brown station the normally protected interference free (60 dBuV) contour would have to extend from the WKDE facility no more than $16\ km$.

The result of the status quo (Brown at 287A in Roanoke and WKDE at 288A in Altavista) is, due to a quirk of nature and the stochastic process which allocations are made, that severe adjacent channel interference will result as there would be an odious level of prohibited adjacent overlap between WKDE and the Brown station. In fact, if WKDE were to move to be fully spaced to Brown, the odious levels of interference would still remain as the Brown facility, towards Altavista, is equivalent (almost) to a maximum class 'C3" facility (a 60 dBuV contour of 37.7 km instead of the usual 28 km).

We fully recognise that the Commission do not account for terrain anomalies and other acts of nature in its Table of Assignments. On the other hand, the adoption of the present rulemaking would obstensibly remove any prohibited first adjacent overlap (in the <u>de facto</u> sense) as the Brown station would be moving to the third adjacent channel relative to Altavista.

In short, the public interest, convenience, and necessity will be served by the Commission promptly and expiditiously granting the exchange of channels proposed in Docket 92-32.

I certify under penalty of perjury that the statements contained herein are true to the best of my knowledge and belief.

York David Anthony Consulting Engineer

/WVVV Blacksburg, VA and WKDE Altavista, VA

This the 15th day March, 1992

Lambert & Anthony Concord, North Carolina

Page 1 March 15, 1992

FM Spacing Study SEOTION

Title: WKDE Altavista, VA Channel 288A (105.5 MHz) Database: DW 03/13/92

Latitude: 37-09-37 Longitude: 79-13-28 Safety zone: 30 km

WPVR LIC JIM GIBBONS RADIO INC 235C 100 37-11-50 273.1 82.57 29 ROANOKE VA 94.9 604 80-09-11 92.6 53.57 CLEAR Affiliated with WFIR(AM)

PRM PROPOSED RULE MAKING 285C3 37-20-33 289.0 63.02 42 ROANOKE VA DOC-92-32 104.9 79-53-50 108.6 21.02 CLEAR PRM adopted 02/24/92, released 03/04/92; SITE RESTRICTION 5.2 MI NE

WRDJ-FM LIC CLARK BROADCASTING COMPA 286A 3 38-24-30 11.5 141.4 31 BRIDGEWATER VA BLH-890606KD 105.1 100 78-54-04 191.7 110.4 CLEAR License Granted 07/12/90 per FCC release #20905 dated 07/18/90; Call Granted 03/01/89

NEW CP SUSAN D BROWN 287A 3 37-17-01 281.7 69.07 72 ROANOKE VA BPH-8806020J 105.3 23 79-59-14 101.2 -2.93 SHORT Deletion proposed; CP Granted 11/27/91 per FCC release dated 12/09/91; Hearing DOC-90-295, adopted 05/21/90, released 06/21/90

PRM DELETION PROPOSED 287A 37-17-01 281.7 69.07 72
ROANOKE VA DOC-92-32 105.3 79-59-14 101.2 -2.93 SHORT
Deletion proposed; PRM adopted 02/24/92, released 03/04/92

NEW APP ROANOKE RADIO LTD PTSHP 287A 1.54 37-13-56 276.5 73.31 72 ROANOKE VA BPH-880601NB 105.3 138 80-02-43 96.0 1.313 CLOSE Amended 09/07/88; Hearing DOC-90-295, adopted 05/21/90, released 06/21/90

PRM PROPOSED RULE MAKING 287C3 37-16-14 276.8 110.4 89
BLACKSBURG VA DOC-92-32 105.3 80-27-39 96.0 21.42 CLEAR
PRM adopted 02/24/92, released 03/04/92; SITE RESTRICTION 3.9 MI NW

WKDE-FM LIC FERNBROOK BROADCASTING C 288A 3 37-09-37 .0 115
ALTAVISTA VA BLH-870130KA 105.5 100 79-13-28 .0 -115 SHORT
Was WKHV 11/15/90 per FCC release #147 dated 11/16/90;
Affiliated with WKDE(AM)

WSHV LIC OLD BELT BROADCASTING CO 288A 3 36-44-39 115.8 105.3 115 SOUTH HILL VA 105.5 70 78-09-42 296.4 -9.68 SHORT See LAWRENCEVILLE VA; Affiliated with WJWS(AM)

WSHV CP OLD BELT BROADCASTING CO 288A 6 36-44-39 115.8 105.3 115 SOUTH HILL VA BPH-900601IA 105.5 98 78-09-42 296.4 -9.68 SHORT CP Granted 11/13/91 per FCC release #21253 dated 11/19/91 Lambert & Anthony Concord, North Carolina Page 1 March 15, 1992

Terrain Averages from NGDC 30-second Topographic database

Job Title: Susan D. Brown
Center of Radiation 496.7 m (1629.6 ft) A.M.S.L.
Latitude: 37-17-01
Longitude: 79-59-14

(Degrees true)		average terrai	3.0 to 16.0 kilometer average terrain elevation (meters) (feet)		average terrain	
_	.0	438.9	1440.0	57.8	189.6	
*	10.0	388.9	1275.9	107.8		
Ж	20.0	375.3		121.4		
*	30.0	372.5	1222.1	124.2		
*	40.0	367.2	1204.7	129.5	424.9	
*	50.0	415.0	1361.5	81.7	268.0	
*	60.0	344.7	1130.9	152.0	498.7	
*	70.0	360.3	1182.1	136.4	447.5	
*	75.0	396.3	1300.2	100.4	329.4	
*	80.0	403.4	1323.5	93.3	306.1	
*	85.0	360.4	1182.4	136.3	447.2	
	90.0	339.4	1113.5	157.3	516.1	
*	95.0	324.0	1063.0	172.7	566.6	
*	100.0	311.9	1023.3	184.8	606.3	
*	105.0	310.3	1018.0	186.4	611.5	
*	110.0	302.6	992.8	194.1	636.8	
*	115.0	302.5	992.5	194.2	637.1	
*	120.0	310.5	1018.7	186.2	610.9	
*	125.0	335.4	1100.4	161.3	529.2	
*	130.0	347.9	1141.4	148.8	488.2	
	135.0	357.0	1171.3	139.7	458.3	
*	140.0	375.5	1232.0	121.2	397.6	
*	150.0	397.6	1304.5	99.1	325.1	
*	160.0	385.8	1265.7	110.9	363.8	

Note that at 100° True (towards WKDE) that the HAAT is at least 185 m. The distance to the 54 dBuV (F50,10) would be 56 km at 6 kw and 48 km at 3 kw. The usual distance is 44 km.

Under the present situation the interference from the Brown station would be within $13-17~{\rm km}$ of WKDE's transmitter site.

CERTIFICATE OF SERVICE

I, David Hoehne, do hereby certify that a copy of these INITIAL COMMENTS in Docket 92-32 were deposited by me, postage prepaid, to the following parties:

Federal Communications Commission 1919 M Street, NW Washington, DC 20554 (original and four copies)

Mark J. Prak, Esquire Tharrington Smith and Hargrove 209 Fayetteville Street Mall Box 1151 Raleigh, NC 27602 (counsel to WVVV)

Julian P Freret, Esquire Booth Freret and Imlay 1920 N Street, NW Suite 150 Washington, DC 20036 (counsel to Susan Brown)

York David Anthony 2613 Craig Avenue Concord, North Carolina 28027

(engineering counsel to WVVV)

David Hoehne WKDE Altavista, VA

This the 17th day March, 1992